TDB Trends Research (Nationwide, Research & Summary January 2023)

Domestic economy deteriorates for second straight month while cost burden increases

 \sim Reflects rising living costs, lackluster production and shipments, and economic uncertainty overseas \sim

(Companies researched: 27,362; Valid responses: 11,719; Response rate: 42.8%; Survey start date: May 2002)

< Trends in January 2023: Deterioration continues >

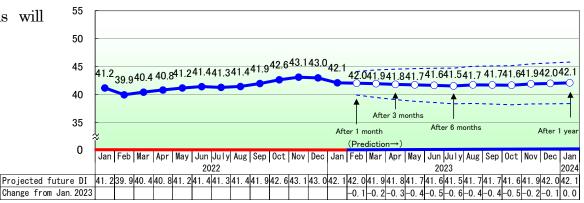
The economic diffusion index (DI) in January 2023 was 42.1, down 0.9 point from the previous month, for a second straight month of deterioration. In addition to rising living costs, lackluster production and shipments owing to a reduction in the operation rate of facilities have caused the domestic economy to decline for a second straight month.

< Future outlook: Continued tendency to level off >

Although uncertainty about economic conditions overseas will heighten, the economy is expected to generally level off.

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- By industry: Downturn in 7 industries, 37 business categories. The cost of raw materials and the jump in electric bills are a heavy burden on corporate activity
- By size: Large corporations are leveling off, but small- and medium-sized companies had a second straight month of decline
- By region: Worsened in all 10 regions for the first time in 11 months. Regional disparities are tending to expand



^{*:} The economic forecast DI is calculated using the Forecast Combination method of the results of the ARIMA model and the structural equation mode

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Ratio to the Previous Month
Total	41.2	39.9	40.4	40.8	41.2	41.4	41.3	41.4	41.9	42.6	43.1	43.0	42.1	▲ 0.9
Large Firms	44.0	42.9	43.4	43.1	43.5	43.5	43.4	43.8	43.6	44.2	45.0	44.8	44.8	0.0
Small to Medium-sized Firms	40.6	39.3	39.8	40.3	40.7	41.0	40.8	41.0	41.6	42.3	42.7	42.6	41.6	▲ 1.0
Micro Firms	39.1	37.9	38.4	38.9	39.5	40.0	39.7	39.8	40.7	41.1	41.4	41.3	40.4	▲ 0.9

Economic Diffusion Index (Economic DI)1/2

		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Ratio to the Previous Month
Agriculture,Forestry,Fisheries		38.7	36.4	34.8	35.0	37.6	34.7	36.3	35.9	35.8	36.4	37.7	37.9	37.4	▲ 0.5
Finance		41.9	41.6	42.5	41.1	42.7	42.3	41.9	41.7	43.6	43.2	44.5	44.3	44.8	0.5
Construction		43.3	42.5	42.8	41.8	42.2	42.5	43.1	43.3	44.0	44.2	44.9	44.6	44.1	▲ 0.5
Real Estate		42.9	42.6	42.8	43.2	44.7	45.9	44.7	44.8	45.3	44.0	45.6	44.8	46.1	1.3
Food, BEWerages, Livestock Feed 3		35.4	33.4	34.2	36.4	37.6	37.8	36.7	36.1	35.5	38.2	38.8	38.3	38.1	▲ 0.2
	Textile, Textile Products, Clothing	31.6	31.7	33.0	34.6	33.8	34.4	36.1	32.6	36.2	35.7	36.5	37.9	37.7	▲ 0.2
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	44.1	42.7	41.1	41.7	41.1	40.4	40.8	39.8	40.2	40.9	41.9	41.0	38.0	▲ 3.0
	Pulp, Paper and Paper Products	40.2	36.4	37.2	40.3	38.3	37.4	37.5	36.6	38.0	40.4	40.2	39.2	39.8	0.6
	Publishing, Printing	28.6	29.5	29.6	30.7	30.3	29.7	29.1	29.6	30.0	31.8	32.9	32.4	31.7	▲ 0.7
Manufacturing	Chemical	44.5	42.3	42.7	42.3	41.7	41.1	41.8	42.6	42.3	40.8	40.8	41.5	40.3	▲ 1.2
	Steel,Nonferrous Metals,Mining	44.6	43.8	42.6	42.1	40.9	41.2	42.9	42.7	43.0	43.9	43.6	43.1	41.7	▲ 1.4
	General Machinery	47.7	46.7	46.7	45.9	46.9	46.3	46.3	46.2	45.4	45.8	45.9	44.9	43.3	▲ 1.6
	Electrical Machinery	46.6	46.1	44.3	44.8	44.3	44.8	44.7	44.2	45.2	44.8	45.4	44.5	43.3	▲ 1.2
	Transportation Machinery, Equipment	41.6	39.9	40.0	38.1	37.6	36.8	40.3	41.2	40.2	42.2	42.1	41.0	38.7	▲ 2.3
	Precision Machinery, Medical Instruments and Equipment	52.0	49.5	47.1	46.8	48.2	48.8	48.5	46.5	46.2	46.1	46.1	46.3	46.5	0.2
	Other	35.9	36.1	35.4	37.3	39.2	38.1	37.8	38.2	37.5	35.4	35.9	37.0	39.1	2.1
	Total	42.5	41.2	40.9	41.2	41.0	40.8	41.3	41.0	41.1	41.6	41.9	41.5	40.4	▲ 1.1
	Food, BEWerages	32.7	30.1	32.6	36.2	37.3	37.1	37.0	35.6	35.8	37.4	38.8	38.2	37.5	▲ 0.7
	Textile, Textile Products, Clothing	27.6	24.9	25.4	28.7	31.4	31.3	29.9	29.9	29.9	32.4	33.1	34.0	34.7	0.7
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	40.0	39.7	40.5	38.6	38.1	38.3	38.6	38.5	37.5	39.8	39.5	40.2	38.3	▲ 1.9
Wholesale	Paper Products, Stationery, Books	32.7	31.9	34.6	33.8	34.2	32.8	33.0	33.5	34.5	37.1	37.0	33.8	34.8	1.0
	Chemical	43.2	41.9	43.5	42.3	42.3	41.6	43.5	43.0	43.4	42.6	43.8	43.5	42.8	▲ 0.7
	Recycled Resources	45.8	50.5	53.2	54.0	47.5	41.4	40.9	39.6	47.0	46.3	43.5	46.2	43.3	▲ 2.9
	Steel,Nonferrous Metals, Mining Products	42.3	40.5	41.1	40.3	40.0	39.7	39.3	39.3	39.8	39. 7	40.2	39.9	38.5	▲ 1.4
	Machinery,Equipment	42.8	42.4	41.9	42.5	42.0	42.9	43.1	42.6	43.3	44.1	44.1	43.8	43.0	▲ 0.8
	Other	36.3	33.7	35.5	37.3	37.8	38.1	37.7	37.7	38.2	39.0	39.6	40.9	40.0	▲ 0.9
	Total	39.0	37.7	38.6	39.2	39.4	39.4	39.5	39.2	39.6	40.6	41.0	41.0	40.1	▲ 0.9

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TDB Trends Research Jan 2023

		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Ratio to the Previous Month
	Food, BEWerages	36.5	36.3	38.6	37.7	41.8	42.7	40.3	39.9	40.2	39.6	43.2	42.2	42.3	0.1
	Textile, Textile Products, Clothing	31.8	23.8	30.6	33.6	33.9	33.6	37.7	33.6	34.9	38.7	38.1	35.4	34.2	▲ 1.2
	Drugs,Sundries	36.0	32.1	36.8	32.1	38.9	40.1	37.1	41.9	39.5	38.9	40.6	39.0	37.2	▲ 1.8
	Furniture	35.6	29.8	30.6	39.2	34.3	39.8	35.2	36.1	40.0	37.8	36.2	31.0	34.2	3.2
Retail	Electrical Household Appliances, Information Machinery and Equipment	32.3	30.2	33.0	33.7	34.7	34.0	36.7	32.7	37.1	35.1	35.3	37.2	36.3	▲ 0.9
	Motor Vehicles, Motor Vehicle Parts	35.0	33.5	34.7	35.1	37.1	36.4	32.4	35.9	38.8	37.6	37.2	35.3	38.2	2.9
	Special Merchandise	33.3	30.9	29.9	31.3	33.1	34.3	33.2	34.7	34.0	33.5	35.4	34.8	34.4	▲ 0.4
	Various Merchandise	36.2	32.6	34.0	36.4	39.9	37.8	40.2	38.0	36.1	41.3	41.4	42.6	42.5	▲ 0.1
	Other	40.0	40.0	43.9	34.7	41.0	39.7	36.9	42.3	32.1	36.5	44.9	41.1	42.3	1.2
	Total	34.4	31.9	33.3	34.0	36.4	36.7	35.7	36.3	36.7	36.8	38.2	37.4	37.5	0.1
Transportati	ion,Warehousing	37.7	35.5	35.4	36.6	37.2	37.1	37.8	37.3	38.2	40.7	41.6	41.6	38.9	▲ 2.7
	Restaurants	24.2	16.9	23.8	32.8	34.3	38.0	34.0	28.1	31.8	39.0	39.1	41.5	38.5	▲ 3.0
	Postal, Telecommunications	46.7	50.0	48.5	50.0	53.0	56.0	47.0	47.9	51.9	52.4	50.0	48.3	47.6	▲ 0.7
	Electricity, Gas, Water, Heat	40.0	37.5	33.3	35.7	40.6	34.3	37.7	35.9	36.1	31.1	32.3	36.7	32.4	▲ 4.3
	Leasing, Rentals	42.0	41.0	40.2	42.0	43.3	44.9	40.8	44.7	45.6	47.5	48.4	47.4	46.8	▲ 0.6
	Lodging, Hotels	12.9	12.8	18.1	28.3	33.0	33.3	30.3	38.0	37.4	53.3	54.8	52.2	48.3	▲ 3.9
	Recreation	33.3	31.2	35.1	35.6	38.9	41.6	40.7	40.1	42.2	45.0	43.8	43.2	42.1	▲ 1.1
	Broadcasting	45.8	47.6	44.4	43.9	43.3	41.7	43.0	38.3	46.1	43.1	41.7	39.5	40.7	1.2
Service	Maintenance, Guarding, Testing	42.3	40.2	42.3	43.1	42.5	44.2	42.2	43.4	42.8	42.8	43.6	45.6	42.9	▲ 2.7
	Advertising	32.7	31.5	36.4	36.9	34.8	37.3	34.3	36.7	39.3	40.9	40.3	39.7	40.2	0.5
	Information	50.1	50.2	51.1	50.8	50.8	52.0	51.5	52.7	53.0	52.3	53.0	53.6	53.2	▲ 0.4
	Labor Dispatching	45.1	41.5	44.4	45.7	47.6	45.7	46.5	49.8	47.4	48.8	46.5	50.0	48.5	▲ 1.5
	Special Services	47.2	46.2	46.9	48.1	48.1	49.6	48.7	48.3	49.4	49.0	48.8	48.7	48.5	▲ 0.2
	Medical, Welfare, Public Health	42.4	41.0	42.5	44.5	44.4	43.5	42.5	41.2	41.7	43.2	43.6	42.8	42.9	0.1
	Education	39.7	40.2	37.8	39.6	35.6	40.1	38.8	39.7	43.7	42.1	42.8	41.2	38.4	▲ 2.8
	Other	39.3	36.9	39.3	42.1	42.7	42.8	42.4	41.2	42.8	43.3	43.5	44.0	42.2	▲ 1.8
	Total	42.8	41.4	43.1	44.5	44.8	45.9	44.4	45.4	46.3	47.1	47.3	47.7	46.6	▲ 1.1
Other		36.3	37.3	38.7	36.8	38.1	35.6	36.6	38.3	37.2	37.9	38.2	36.7	36.5	▲ 0.2
		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Ratio to the Previous Month

Economic Diffusion Index (Economic DI)2/2

	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Ratio to the Previous Month
Hokkaido	38.6	37.0	36.5	37.9	38.9	40.1	41.0	40.2	40.7	41.2	40.9	40.8	40.1	▲ 0.7
Tohoku	38.1	37.0	37.0	37.6	39.1	39.0	38.8	38.1	39.3	39.9	40.3	39.4	38.0	▲ 1.4
kitakanto	42.3	40.7	40.7	42.0	42.1	42.6	42.9	43.8	42.5	43.7	43.7	43.1	40.9	▲ 2.2
minamikanto	42.6	41.5	42.1	42.4	42.7	43.2	42.6	43.3	43.6	43.8	44.4	44.7	44.1	▲ 0.6
Hokuriku	40.9	39.2	39.2	39.9	40.6	40.5	41.5	40.8	41.7	42.3	42.2	42.2	40.9	▲ 1.3
Tokai	41.1	39.7	40.2	40.2	40.1	39.5	39.5	39.7	40.4	41.1	41.4	41.7	41.0	▲ 0.7
Kinki	40.8	39.8	40.5	40.8	40.9	40.9	40.9	41.1	41.5	42.3	43.0	42.7	42.0	▲ 0.7
Chugoku	40.7	40.0	40.7	39.8	40.6	41.1	41.3	40.9	41.8	42.8	43.8	43.4	41.9	▲ 1.5
Shikoku	39.3	37.1	38.9	38.1	38.7	38.4	38.3	37.7	38.7	40.3	40.0	39.3	39.0	▲ 0.3
Kyushu	41.3	39.5	40.9	41.5	41.6	42.2	41.5	41.3	43.0	44.0	45.1	44.8	44.0	▲ 0.8

Appendix

1.Research Subjects(Companies researched: 27,362; Valid responses: 11,719; Response rate: 42.8%)

1.Region

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Hokkaido	564	Tokai	1,273
Tohoku	800	Kinki	1,988
kitaKanto	889	Chugoku	819
minamikanto	3,389	Shikoku	373
Hokuriku	599	Kyushu	1,025
		Total	11,719

2.Industry (10 Industries 51 Lines of business)

Agriculture, F	orestry,Fisheries	120
Finance		163
Construction		1,834
Real Estate		463
	Food, Beverages, Livestock Feed	341
	Textile, Textile Products, Clothing	118
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	221
	Pulp, Paper and Paper Products	87
	Publishing, Printing	168
Manufacturing	Chemical	388
(2,900)	Steel,Nonferrous Metals,Mining	538
	General Machinery	468
	Electrical Machinery	309
	Transportation Machinery, Equipment	100
	Precision Machinery, Medical Instruments and Equipment	76
	Others	86
	Food,Beverages	361
	Textile, Textile Products, Clothing	172
	Construction Materials, Furniture, Ceramics, Stone and Clay Products	311
Wholesale	Paper Products, Stationery, Books	92
(2,729)	Chemical	272
	Recycled Resources	30
	Steel,Nonferrous Metals,Mining Products	283
	Machinery, Equipment	863
	Others	345

	Total	11,71			
Others		4			
	Others	24			
	Education	3			
	Medical,Welfare,Public Health	14			
	Special Services	31			
	Labor Dispatching	8			
	Information	60			
	Advertising	12			
(2,222)	Maintenance, Guarding, Testing	20			
Service	Broadcasting	1			
	Recreation	10			
	Lodging, Hotels	11			
	Leasing, Rentals	10			
	Electricity, Gas, Water, Heat	1			
	Telecommunications				
	Restaurants	9			
ransportat	on,Warehousing	53			
	Others	6			
	Various Merchandise				
	Special Merchandise				
	Motor Vehicles.Motor Vehicle Parts	10			
(714)	Electrical Household Appliances, Information Machinery and Equipment	3			
Retail	Furniture	1			
	Drugs.Sundries	6			
	Food, Beverages Textile, Textile Products, Clothing	12			

3.Size

Large Firms	1,791	15.3%
Small to Medium-sized Firms	9,928	84.7%
micro Firms	3,806	32.5%
Total	11,719	100.0%

2.Research Items

*Business Confidence (current, in 3 months, in 6 months, in 1 year) *Business Conditions (sales, purchasing and selling unit price, inventory, capacity utilization ratio, number of employees, overtime work hours)

3. Research Period and Methodology

Internet-based survey conducted January 18 - 312023

The explanation of the Economic Diffusion Index

Research Purpose/Researched Terms

TDB Economic Trend Research (started from May 2002) is a monthly statistical survey conducted for over 26,000 nationwide corporations on their general business activities including the current condition and future outlook of the industry business performance and operating climate. The primary purpose of such a survey is to assess the current state of Japan's economy.

Selection of the Subject Corporations

Companies of all sizes in all domestic industries are eligible to participate in the survey.

DI Calculation

The DI (Diffusion Index) is calculated by multiplying the number of responses for each assessment category by the number given in parentheses in the table below, to a seven-level assessment rated by companies.

Selection category	Extremely good	good	fairly good	neither good nor bad	fairly bad	bad	very bad
points	6	5	4	3	2	1	0
number of responses for each category	N ₆	N_5	N ₄	N ₃	N ₂	N ₁	N ₀

Economic DI

 $= \frac{\text{Total of (Points for each category} \times \text{Number of responses for each category})}{\times - \times 100}$

Number of valid responses N

$$\equiv \frac{\sum_{i=0}^{6} i \times N_i}{N} \times \frac{1}{6} \times 100$$

An economic DI of 50 is <u>the point separating good and bad</u>, so a DI over 50 means "good," and below 50 means "bad." (The numbers are rounded off to one decimal place.) No weight is given according to a company's size, and calculations are made on the basis of "one company, one vote."

Size Classification

Industry	Large Firms	Small to Medium-Sized Firms (Micro Firms included)	Micro Firms
Manufacturing and	Capital: More than 300 million yen	Capital: Below 300 million yen	
Other Industries*	and	or	No. of Employee: Below 20
	No. of Employee: Over 300	No. of Employee: Below 300	
Wholesale Trade	Capital: More than 100 million yen	Capital: Below 100 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 100	No. of Employee: Below 100	
Retail Trade	Capital: More than 50 million yen	Capital: Below 50 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 50	No. of Employee: Below 50	
Service**	Capital: More than 50 million yen	Capital: Below 50 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 100	No. of Employee: Below 100	

Note1: Large Firms refer to companies that rank in the top 3% in terms of sales volume according to the type of business, among small to midium-sized corporations excluding micro firms, which are defined in Small and Medium Enterprises Basic Act.

Note2: Small to Medium-Sized Firms refer to companies that rank in the bottom 50% in terms of sales volume according to the type of business, among those not categorized as small to midium-sized corporations in Small to Medium-Sized Enterprises Basic Act.

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